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Testing Device for Verifying the Performance of Digital Recorders

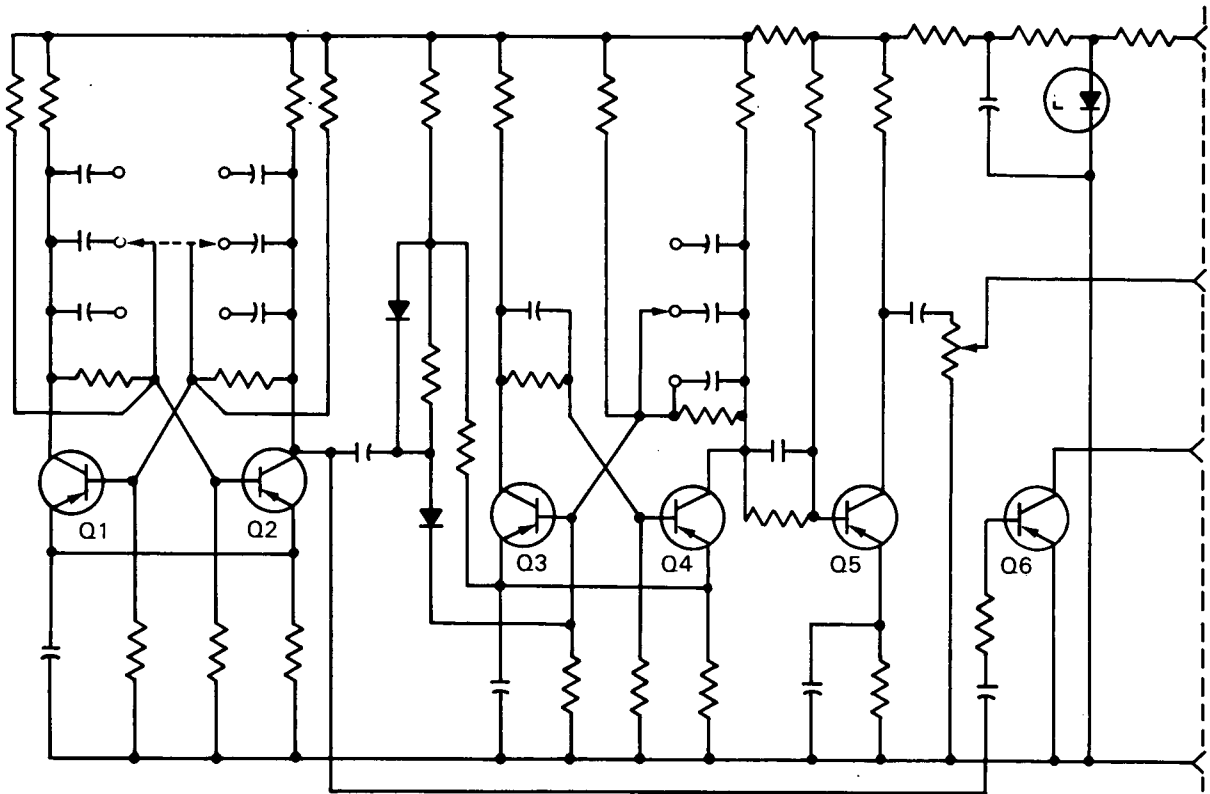


Figure 1. Pulse Generator Section

To verify that paper-tape digital recorder-printers of one particular model perform to specifications, a test device has been constructed for accurate checking and calibration.

The test set consists of two units, a pulse generator section and a manual program section. The pulse generator section shown in Figure 1, contains a variable rate multivibrator, Q1 - Q2; a variable width pulse shaper, Q3 - Q4; and output amplifiers for print-

command and data-program signals, Q5 and Q6 respectively. The manual section, shown in Figure 2, contains an amplitude control for the data output, a 12-position switch for selecting the proper test integers, and a switch which permits manual operation of the instrument. Power to the test set is supplied from the negative bias supply of the recorder being tested.

The advantages of this device over existing systems are that it permits accurate performance verification

(continued overleaf)

with a single test unit, and can be used for both in-place and bench calibration. Also, the device reduces the time required for test setup, and is adaptable to

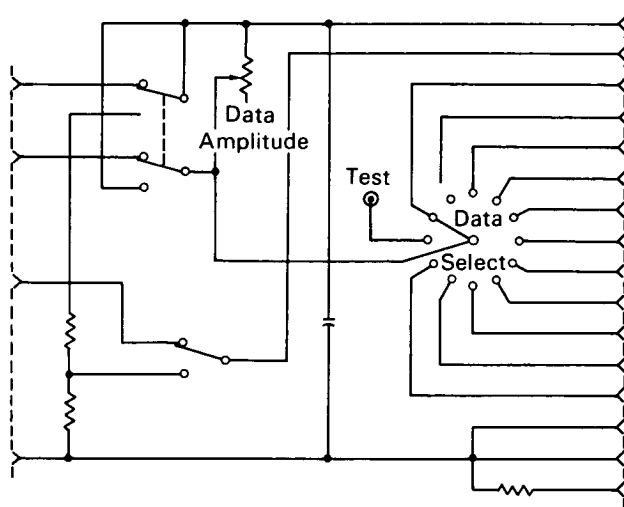


Figure 2. Manual Control Section

certain other recorder (electrical and mechanical) configurations.

Note:

Requests for further information may be directed to:
Technology Utilization Officer
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Kennedy Space Center, Florida 32899
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No patent action is contemplated by NASA.

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